



ST4
7-15-2

PIPER RUDNICK LLP
1200 NINETEENTH STREET, NW
WASHINGTON, DC 20036-2412
TELEPHONE: 202-861-3900
FACSIMILE: 202-223-2085

DOCKET NO.: 2343-133-27

ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20231

Re: Serial No.: 10/046,731
Applicant(s): Shiquan TAO, et al.
Filing Date: January 17, 2002
For: OPTICAL FIBER SENSOR HAVING A SOL-GEL FIBER CORE AND
A METHOD OF MAKING
Group Art Unit: 2874
Examiner:

SIR:

Attached hereto for filing are the following papers:

INFORMATION DISCLOSURE STATEMENT
FORM PTO-1449
CITED DOCUMENTS (15)

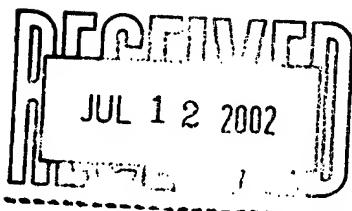
Our check in the amount of \$ -0- is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary extension of time to make the filing of the attached documents timely, please charge or credit the difference to Deposit Account No. 50-1442. Further, if these papers are not considered timely filed, then a request is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

PIPER RUDNICK LLP

Steven B. Kelber
Attorney of Record
Registration No.: 30,073

Christopher W. Raimund
Registration No.: 47,258



162600 MAIL ROOM
JUN - 7 2002
RECEIVED

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION: Shiquan TAO, et al.

SERIAL NUMBER: 10/046,731

FILED: January 17, 2002

FOR: OPTICAL FIBER SENSOR HAVING A SOL-GEL FIBER CORE AND A METHOD OF MAKING

GROUP ART UNIT: 2874

EXAMINER:



INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Applicant(s) wish(es) to disclose the following information.

REFERENCES

Applicant(s) wish(es) to make of record the documents listed on the attached Form PTO-1449. Copies of the listed documents are attached, where required, as are either statements of relevancy or any readily available full or partial English translations of any non-English-language documents.

RELATED CASES

Attached is a list of Applicant's(s') pending applications and issued patents which may be related to the present application. Copies of the documents, where required, are attached along with Form PTO-1449.

CERTIFICATION

The undersigned certifies that

each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign or international patent office in a counterpart foreign or international application for the first time (to the knowledge of the undersigned, having made reasonable inquiry) not more than three months prior to the filing of this statement.

no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign or international patent office in a counterpart foreign or international application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.

BASIS FOR CONSIDERATION

This Information Disclosure Statement is filed:

without fee and within three months of the filing date of the application.
 without fee and within three months of the date of entry of the U.S. national stage.
 without fee and before the mailing date of a first Office Action on the merits (to the knowledge of the undersigned).
 without fee and with the appropriate certification above.
 without fee and with a new CPA application.
 without fee and with a Request for Continued Examination.
 with fee and before the mailing date of any of a Final Office Action, Notice of Allowance or an action that otherwise closes prosecution (to the knowledge of the undersigned).
 with fee, appropriate certification above, and before payment of the Issue Fee.

DEPOSIT ACCOUNT

Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to Deposit Account No. 50-1442.

Respectfully submitted,

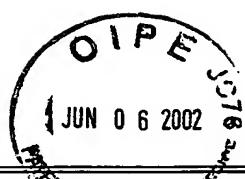
PIPER RUDNICK LLP

Steven B. Kelber
Attorney of Record
Registration No. 30,073

Christopher W. Raimund
Registration No. 47,258

1200 Nineteenth Street, N.W.
Washington, DC 20036-2412
Telephone No. (202) 861-3900
Facsimile No. (202) 223-2085

RECEIVED
JUN - 7 2002
122800 MAIL ROOM



Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	DOCKET NO. 2343-133-27	SERIAL NO. 10/046,731
		APPLICANT Shiquan TAO, et al.		
LIST OF REFERENCES CITED BY APPLICANT (Use Several Sheets if Necessary)		FILING DATE January 17, 2002	GROUP ART UNIT 2874	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5,249,251	9/28/93	Egalon, et al.			
	AB	5,250,095	10/5/93	Sigel, Jr., et al.			
	AC	6,022,748	2/8/00	Charych, et al.			
	AD						

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES NO
	AE				
	AF				

OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.)

	AG	Grattan, et al., "Fiber Optic Sensor Technology: Introduction and Overview", Grattan, et al. (eds.), Optical Fiber Sensor Technology Fundamentals, Kluwer Academic Publishers, Dordrecht, 1-44 (2000).
	AH	MacCraith, et al., "Optical Fiber Chemical Sensor Systems and Devices", Optical Fiber Sensor Technology, Volume 4, Chemical and Environmental Sensing, Grattan, et al. (eds.), Kluwer Academic Publishers, Dordrecht, 15-112 (1998).
	AI	"Applications", Chemical and Biochemical Sensing with Optical Fibers and Waveguides, Part IV, Boisde, et al. (eds.), Artech House Inc, Boston, 285-289 and 339-353 (1996).
	AJ	Messica, et al., "Theory of Fiber-Optic, Evanescent-Wave Spectroscopy and Sensors", Applied Optics, 35, 13, 2274-2284 (1996).
	AK	Badini, et al., "Sol-Gels with Fiber Optic Chemical Sensor Potential: Effects of Preparation, Aging, and Long-Term Storage", Rev. Sci. Instrum., 66, 8, 4034-4040 (1995).
	AL	MacCraith, et al., "Sol-Gel Coatings for Optical Chemical Sensors and Biosensors", Sensors and Actuators, B29, 51-57 (1995).

EXAMINER	DATE CONSIDERED
<p>*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.</p>	

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	DOCKET NO. 2343-133-27	SERIAL NO. 10/046,731
		APPLICANT	JUN 06 2002 RECEIVED U.S. PATENT AND TRADEMARK OFFICE 100 BRADLEY PLACE, BETHESDA, MD 20814-2399 RECEIVED JUN 17 2002	
LIST OF REFERENCES CITED BY APPLICANT (Use Several Sheets if Necessary)		FILING DATE January 17, 2002	GROUP ART UNIT 2874	
	AM	Flora, et al., "Comparison of Formats for the Development of Fiber-Optic Biosensors Utilizing Sol-Gel Derived Materials Entrapping Fluorescently-Labelled Proteins", Analyst, 124, 1455-1462 (1999).		
	AN	Keeling-Tucker, et al., "Controlling the Material Properties and Biological Activity of Lipase Within Sol-Gel Derived Bioglasses Via Organosilane and Polymer Doping", Chemistry of Materials, 12, 3695-3704 (2000).		
	AO	Yan, et al., "Synthesis, Characterizations, and Optical Properties of Stacked Porous Thin Film Derived from Sol-Gel Process", J. Am. Ceram. Soc., 79, 4, 1061-1065 (1996).		
	AP	Santos, et al., "Properties of Porous Silica Glasses Prepared Via Sol-Gel Process", Journal of Non-Crystalline Solids, 273, 145-149 (2000).		
	AQ	Tanaka, et al., "Monolithic LC Column: A New Type of Chromatographic Support Could Lead to Higher Separation Efficiencies", Anal. Chem., 73, 420A-429A (2001).		
	AR	Hypszer, et al., "Fiber Optic Technique for Relative Humidity Sensors", SPIE, 3054, 145-150 (1997).		
	AS			
	AU			
	AV			
	AW			
	AX			
	AY			
	AZ			
	BA			
	BB			
	BC			
	BD			
	BE			
	BF			
	BG			
EXAMINER			DATE CONSIDERED	
<p>*EXAMINER: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.</p>				

RECEIVED
 JUN -7 2002
 TO 2800 MAIL ROOM